



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,199	01/09/2002	Osamu Takuman	TSL1695	9761

7590 01/15/2004

MCKELLAR STEVENS & HILL
POSEYVILLE PROFESSIONAL COMPLEX
784 SOUTH POSEYVILLE ROAD
MIDLAND, MI 48640

EXAMINER

ZIMMER, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,199

Applicant(s)

TAKUMAN ET AL.

Examiner

Marc S. Zimmer

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

In response to the Examiner's indication of allowable subject matter in original claim 2, Applicant has incorporated the limitation recited therein into amended claim 1. (Although no rationale had been provided previously, it was ostensibly the Examiner's view that the prior art had not motivated one of ordinary skill to select precipitated calcium carbonate as a species from the genus comprising calcium carbonate.) However, in an updated survey of the prior art, the Examiner discovered a reference directed to a similar composition with an analogous intended use. In view of the parallels in the two disclosures, one of ordinary skill would have turned to the secondary reference cited *infra* for direction as to what members of the calcium carbonate genus are appropriate.

The finality of the case is withdrawn in view of the new grounds of rejection presented herein.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Step I refers to the "the" adhesive composition but it is not exactly clear which embodiment of the present composition to which Applicant is referring. There is no antecedent basis earlier in claim 8 for said composition.

Undoubtedly, this problem has arisen from Applicant's conversion of this claim into independent form (this despite Applicant's erroneous indication that the language is

that of the original which had depended from claim 1.) Claim 8 should be re-amended such that it is consistent with original claim 8 or the makeup of the adhesive composition should be specified. For the purpose of evaluating this claim against the prior art, it will be presumed that "adhesive composition" refers to the composition of claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishuima et al., U.S. patent # 6,166,121 in view of Hara et al., U.S. patent # 6,613,440. As before, *Nishiumi* discloses an organopolysiloxane adhesive composition that exhibits improved adhesion to various surfaces, especially under severe conditions, by virtue of its inclusion of a calcium carbonate powder having a BET specific surface area of at least 5 m²/g. According to column 2, lines 33-67 through column 3, lines 1-3, the polysiloxane matrix may be any of the previously known curable silicones including the addition curing type which, of course, contain an alkene group-functionalized siloxane polymer component, an organohydrogenpolysiloxane, and a platinum hydrosilylation catalyst which is made available as 100 weight parts relative to 10 to 200 wt. parts of the inorganic filler (column 4, lines 29-32). A mixture of rosin and fatty acid are used in a 1:9 to 9:1 ratio is used to treat the filler prior to its incorporation into the

silicone. The reference is, nonetheless, deficient due to its silence regarding the type(s) of calcium carbonate that may be employed.

Hara, likewise, discloses an addition-cured polyorganosiloxane adhesive comprising treated calcium carbonate wherein the heavy, precipitated, and colloidal types are all deemed suitable for use. Unlike *Nishuima*, *Hara* advocates the utilization of an organosilicon compound as opposed to a combination of organic acids to treat the aforementioned filler component. This difference notwithstanding, it is believed that one of ordinary skill would have relied on *Hara*'s disclosure to determine what forms of calcium carbonate would have been suitable in practicing *Nishuima*'s invention given the extent to which the inventions mirror one another.

Concerning claim 3, *Hara* contemplates the addition of silica as a reinforcing powder in an amount corresponding to 0 to 200 parts by weight relative to the 100 parts of the other materials in column 11, lines 48-57.

As for claim 5, it is recommended that the organohydrogensiloxane be made available in a quantity that provides 0.5 to 4 mol of SiH groups per mol of alkenyl groups in the base polymer (column 5, lines 59-64).

As for claim 7, one of ordinary skill will appreciate that the silica component, which is characterized as a reinforcing filler, will inherently have a BET surface area in the specified range.

Allowable Subject Matter

Claim 8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. Claims 9 and 10

Art Unit: 1712

are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Neither reference teaches explicitly or implicitly the utilization of the adhesive composition as a bonding agent for distinct silicone rubber surfaces. Also, Hara discloses mixing the silica, base silicone, and calcium carbonate together while heating prior to adding the crosslinking agent and catalyst whereas, claims 9 and 10 mandate either that all of the ingredients are mixed concomitantly or, alternatively, that the silica and base polymer are first blended followed by introduction of the calcium carbonate. There is nothing motivating one of ordinary skill to deviate from the method advocated by Hara.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Vasu Jagannathan
VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700